



REMARKS/ARGUMENTS

The amendments and remarks hereto attend to all outstanding issues in the pending office action of June 24, 2003. Claims 1-41 remain pending in this application. Claims 24, 31, 32, 39, and 40 are amended. Claims 42-50 are new.

In the Drawings

Figure 2 amendments include labeling several edges and surfaces that were in the drawing but were previously unlabeled, so that the specification can properly reference these edges and surfaces. Figure 2 amendments also include the substitution of labels (70A) and (70B) for bodies previously labeled (70), so that the specification can properly reference those bodies. No new matter is added.

Figure 3 amendments include addition of the text "Fabricate Five Layer Unit 600" which was inadvertently left out of the original drawing, but is a step recited in the specification. Figure 3 amendments also include removal of an extraneous box, and the box around the text "Fabricate Trilayer Core 10" to secure clear correspondence with the text of the specification. No new matter is added.

In the Specification

In the Detailed Description of Figure 2, two paragraphs are added and three paragraphs are amended to clarify which bodies, surfaces and edges are involved in various fabrication steps. These amendments correlate to the amended labeling of Figure 2. The bodies, surfaces and edges now labeled and described were present in the unamended Figure 2, no new matter is added.

In the Detailed Description of Figure 3, the text "(300)" was inadvertently left out of the original text and is added to the sentence reciting the "Deposit Cathode Layer" step, to correlate with Figure 3. The text "(400)" is moved from after the words "five layer unit," where its meaning was ambiguous, to a location where it clearly refers to the

"Deposit Interconnect Layers" step, to correlate with Figure 3. A reference to the trilayer core in the same sentence is labeled with the text "(10)". "Finally, the text "(600)", inadvertently omitted from the original text, is added where it clearly refers to the "Fabricate Five Layer Unit" step, to correlate with Figure 3. These changes serve only to secure better correspondence between Figure 3 and the specification, no new matter is added.

In the Detailed Description of Figures 4, 5a, 5b, and 5c, a clause was added to clarify that the interconnect layers (70) of these figures are the interconnect layers (70A, 70B) of Figure 2 as amended. No new matter is added.

In the Claims

Applicants submit amendments to claims 24, 31, 32, 39, and 40, which are discussed below with respect to claim rejections.

Applicants submit new claim 42, depending from claim 1, which Examiner indicated was allowable. The additional claim limitation of the interconnect layer "interfacing with one or more edges of the electrolyte layer," as supported in the specification at page 7, lines 26-28.

Applicants submit new claims 43-46, each depending from claim 31, which Examiner indicated is allowable if rewritten in independent form. Since claim 31 has been rewritten as indicated, all of claims 43-46 are allowable. Claim 43 finds support in the specification at page 9, lines 22-27, and in claim 29. Claim 44 finds support in the specification at page 4, lines 27-28, and in claim 33. Claim 45 finds support in the specification at page 5, lines 3-11, page 6, lines 23-30, and in claim 34. Claim 46 finds support in the specification at page 5, lines 12-21, page 6, line 31 through page 7, line 8, and in claim 35.

Applicants submit new independent claim 47, and claims 48-50 each depending from claim 47. These new claims find support in the specification at page 4, line 29

through page 10, line 10, at page 11, line 20 through page 15, line 5, and in Figure 2 and Figure 3.

Response to Claim Rejections – 35 USC §102(b)

Claims 24, 29 and 36 stand rejected as being anticipated by U.S. Patent No. 5,403,461 ("Tuller"). Applicants respectfully traverse the rejection, but also elect to amend claim 24 to include the limitations of claim 1, which the Examiner has found allowable. Claims 29 and 36 depend from claim 24, and are likewise allowable. Applicants request the Examiner to withdraw the 35 U.S.C. §102(b) rejection of these claims.

Response to Claim Rejections – 35 USC §103

Claims 24, 26, 30, 33-37 stand rejected as being unpatentable over U.S. Patent No. 5,935,727 ("Chiao '727"). Claims 24-30, 36-38, and 40 stand rejected as being unpatentable over U.S. Patent No. 5,356,730 ("Minh"). Claims 24-27, 30, 36-37, and 40 stand rejected as being unpatentable over U.S. Patent No. 6,228,520 B1 ("Chiao '520"). Claims 24, 29-30, 33-34, and 36 stand rejected as being unpatentable over U.S. Patent No. 5,922,486 ("Chiao '486"). While Applicants respectfully traverse these rejections, the amendment of claim 24, as described above, renders all of these rejections moot. Among other reasons for allowability, the limitations of claim 1 (which Examiner has found allowable) are now present in claim 24 and all of claims 25-30 and 33-38, which depend from claim 24. These features are not taught or suggested in any of the applied references, as required for prima facie obviousness under 35 U.S.C. §103. Applicants request reconsideration of Examiner's rejection of these claims under 35 U.S.C. §103.

Claim 40 has also been amended to include the limitations of claim 1, which the Examiner has found allowable. Applicants respectfully point out that this claim amendment does not require further search or consideration, because it relies on

previously searched and considered matter. Applicants request entry of this amendment and reconsideration of Examiner's rejection of claim 40 under 35 U.S.C. §103.

Response to Claim Rejections – 35 USC §112

Claims 40 and 41 stand rejected as indefinite, with Examiner arguing "A claim cannot be both method and apparatus; it must be clear by its wording that it is drawn to one of the other of these two mutually exclusive statutory classes of invention." Examiner may have read claim 40 as an attempt to *claim* both a process and an apparatus in the same claim, which would be improper (as per MPEP 2173.05(p)). Applicants traverse this rejection, respectfully pointing out that the rejected claim 40 - "A method of manufacturing stacks of thin-film electrochemical devices comprising the step of connecting a plurality of apparatus of claim 24." - is a pure method claim, reciting a single step, and further limiting the step to work upon specific structure. Applicants cite MPEP 2173.05(f) which states, in part, "A claim which makes reference to a preceding claim to define a limitation is an acceptable claim construction which should not necessarily be rejected as improper or confusing under 35 U.S.C. §112, second paragraph." However, as noted above, Applicants elect to amend claim 40 by incorporating the limitations of claim 1, which have been previously searched and considered, directly into the text of the claim. Applicants request reconsideration of the rejection of claim 40 under 35 U.S.C. §112, second paragraph.

Claim 41 reads, "The method of claim 40 wherein said connecting comprises a technique selected from a group consisting of ceramic-ceramic bonding, transient liquid phase bonding, and brazing." Applicants see nothing objectionable in this construction other than its dependence from claim 40, and suggest that this claim should not be rejected, but objected to as depending from a rejected base claim. Applicants request reconsideration of the claim 41 rejection under 35 U.S.C. §112, second paragraph, in view of the amendment to claim 40. If the Examiner maintains this rejection, Applicants

respectfully request a specific indication of the indefiniteness within the claim that forms the basis for the rejection.

Response to Allowable Subject matter

Applicants thank the Examiner for indicating the allowability of claims 1-23.

As suggested in the instant Office action, claims 31, 32, and 39 have been amended by rewriting them in independent form including all of the limitations of the base claim and intervening claims on which they depended. Applicants respectfully point out that these claim amendments do not require further search or consideration, due to their reliance on previously searched and considered matter, and requests entry of these amendments.

FINAL PAGE

In view of the above Amendments and Remarks, Applicants have addressed all issues raised in the Office Action dated June 24, 2003, and respectfully solicits a Notice of Allowance. Should any issues remain, the Examiner is encouraged to telephone the undersigned attorney.

A fee of \$172 is submitted as payment for the new total of 7 independent claims in the application, a fee of \$81 is submitted as payment for new claims 42-50, and a fee of \$475 is submitted as payment for a three month extension of time to respond to the Office Action dated June 24, 2003. Applicants believe no other fees are currently due, however, if any other fee is deemed necessary in connection with this Amendment and Response, please charge Deposit Account No. 12-0600.

Respectfully submitted,

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